

CENTRAL INTELLIGENCE AGENCY

INFORMATION REPORT

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COUNTRY	Czechoslovakia	REPORT	
SUBJECT	First Brno and Kralovo Pole Machine Works, Gottwald Works, Plant No. 1, in Brno-Kralovo Pole	DATE DISTR.	26 October 1954
DATE OF INFO.		NO. OF PAGES	23
PLACE ACQUIRED		REQUIREMENT NO.	RD
		REFERENCES	

This is UNEVALUATED

THE SOURCE EVALUATIONS IN THIS REPORT ARE DEFINITIVE.
THE APPRAISAL OF CONTENT IS TENTATIVE.
(FOR KEY SEE REVERSE)

- Up to September 1953, Plant No. 1 of the Gottwald Works was in the northern Brno suburb of Kralovo Pole.
- The western side of the plant was bordered by the double-tracked Brno-Tisnov railroad which turned to the east at the southeastern extremity of the plant, forming a southern boundary. This track ran through Husovice (P50/N40) to the main railway station in Brno. The northeastern boundary of the factory enclosure was formed by an asphalt lane which connected Husovice to Kralovo Pole. (See Annex A for sketch and legend of plant.)
- The machines were in very good condition, as the old ones were exchanged and maintained regularly. Most of the machines were of foreign origin. Czech machines of the TOS model were delivered from the Kurim plant of TOS, National Enterprise. Since the Gottwald Works were built on swampy ground and operation in the smithy and the tool shop caused continued vibrations, the factory was not suitable for precision engineering. Foundations of new buildings were being provided with concrete footings, seven meters deep.
- The railroad car shop was divided into four parts by three crane tracks. Outside the shop there was an underground pipeline for compressed air for drilling machines, pneumatic grinding machines, and riveting machines. In the shop there were also a number of grinding, drilling and other auxiliary machines used in assembly. (See Annex B for sketch and legend.)
- The Old Oil Plant (stara petrolka) was divided into three parts by crane tracks. In the welding shop various nonferrous metals were welded by a new

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(NOTE: When distribution indicated by "X"; Field distribution by "#")

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so-called argon method. This was a combination of electrical arcwelding and of butane mixed with other gases. The argon method made it possible to work with metals which previously could not be welded, such as aluminum and stainless steel. Prolonged work with argon welding equipment caused sterility of the worker. (See Annex C for sketch and legend.)

6. The boiler department had some special arcwelding equipment which did not emit any rays. It was produced at the Chotebor Works and put into operation in May 1953.² It was based on the old arcwelding system with a special mixture inserted into the apparatus when the welding process began. This served a double purpose, to prevent radiation and to protect the welded part from oxidation. No further machining was necessary and a very fine finish was obtained, with the burnt mixture easily knocked off. This method reduced considerably the number of rejects, caused by hand-operated welding of boilers. Previously, all boilers had to be X-rayed before being shipped from the plant and about half had to be rewelded.
7. The main stores were located in a four-story building. (See Annex D for sketch and legend.)
8. (See Annex E for sketch and legend of old cutting shop.)
9. (See Annex F for sketch and legend of new cutting shop.)
10. (See Annex G for sketch and legend of the forge.)
11. (See Annex H for sketch and legend of the structural steel shops.)
12. There were about 10,00 employees, which included 3,000 foreign workers, some of whom were Greeks, Italians, Bulgarians, and gypsies. Most of these were auxiliary laborers. About half of the employees were technical and administrative workers; not only engineers, draughtsmen, and constructors, but also foremen, team leaders, etc. were regarded as technical personnel. Workers joked about the high percentage of white-collar workers, saying that for every manual worker there were two office workers. 30% of all the employees were women, most of whom worked in administrative departments; 10% of the workmen were former administrative employees. Many foremen and workshop leaders lacked expert knowledge and got their jobs because of their political activities.
13. The plant worked three fully manned shifts, but technical personnel worked only on one shift.
14. The products of the plant included railway cars, type PH, multi-axle (4 axles), which had the double capacity of a normal freight car. About five were produced monthly. Also, Czech-type and Soviet-type tank cars were produced; they were made of aluminum, steel, and stainless steel. The Czech-type tank car was of an old design, although the undercarriage was made wider. They were formerly delivered primarily to the USSR. Those made of aluminum were delivered primarily to a chemical plant in Slovakia. Oil tank cars for Czechoslovakia were made of steel. An order for 300 tankers was placed in the summer of 1952, but in September 1953, only 50 had been completed. The USSR placed an order for 500 tank cars and production began in March 1953; however, until September 1953, only 20 had been delivered. Tank cars produced for the USSR were similar to the Czech type, but had a built-in camouflage device to make it appear to be an ordinary freight car when seen from the air. Production was first started at the beginning of June 1953. They were made of steel or stainless steel. Another type of tank car produced for the USSR was similar to the one described above, but was protected against frost by a double layer of glass wool, 20 cm. thick, and was covered with steel sheets. These tank cars were taken over by Soviet engineers, who scrutinized each part as well as their three coats of paint. Generally, the Soviet engineers refused to accept one half of all the cars.

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15. A Soviet order for six underground tanks was received in spring 1953; and up to September 1953, two had been delivered. They were of a special stainless metal, "Bimetal", sent from the USSR. Each tank was six meters in diameter, 26 meters long, and had three drain taps and four holes for connecting underground pipes. From these underground tanks, pipelines, each 100 km. long, could branch off in four directions. They were to be used as fuel tanks for the Soviet Army. In the event that a tank fell into enemy hands, fuel could still be obtained through the pipelines by means of compressed air. The cupola to the pipeline was made of pressed steel. An order for a similar, but oval-shaped, tank was placed in August 1953 by the Czechoslovak Government. Employees assigned to this job were bound by an oath of secrecy and referred to their work as the "Order Problem". These tanks were apparently for military purposes.
16. Locomotive tenders for the USSR were broad-gauge, were six meters long, three meters wide, and two meters high, and were made of steel. Around the tender was a water tank. The order was for 50 units, but up to September 1953 about 30 had been delivered. Two tenders were produced a month.
17. Due to the mass of orders placed by the Soviet Government for oil equipment for boilers, dredgers, refrigerating equipment, drying equipment, and special plywood pressing machines, production of streetcars was temporarily suspended. Steel boilers of various types and sizes, as well as various pipes and screws, were made to Soviet specifications.
18. Cooling equipment consisted of a steel boiler, two meters in diameter and four meters in length. Inside was a screw, 20 cm. in diameter, placed in a pipe.
19. The drying apparatus was 5 x 2 x 1 1/2 meters in size, made of steel, with coiled pipes, 15 cm. in diameter, placed in two rows. Workers doubted that it was actually drying equipment and suspected it was merely a part of some other apparatus for a different purpose.
20. Cranes produced for Czechoslovakia were of varying capacity (from 5 to 30 tons) and length. Tracks for cranes, solid or reinforced, the latter an old model, were being made. Cranes for the USSR were of 60 to 300 tons' capacity. The 300-ton crane was 20 meters long, 2 1/2 meters high, and 6 meters wide. The first Soviet order was for two 300-ton and three 200-ton cranes, but it was expected that additional orders would be placed. The crane track was reinforced by steel sheets, 60 mm. thick. The gauge was wider than that of normal cranes. Crane trolleys were provided with two hooks of different sizes. The 300-ton cranes were the largest ever made by the Gottwald Works. Workers at the plant believed they would be used in the armament industry. Smaller cranes of 60- to 80-ton capacity were also being made for Soviet industrial plants.
21. High-tension masts built for Czechoslovakia were 1 1/2 x 1 1/2 meters in size, eight to ten meters in height, sunk into a concrete base. The cross beam was four meters long (see sketch in Encl. B). Thirty masts were ordered by the Czechoslovak Government and about half had been delivered in September 1953. About five were produced monthly. High-tension masts for the USSR were of the same design, but the Soviets ordered a larger number than the Czechoslovak Government. Because norms were fixed so high, employees refused to work on this Soviet order.
22. Other machinery ordered by the USSR included the following:
 - a. Plate-bending machines with 3 mm. capacity of the Czech design. The monthly output was eight to ten machines.
 - b. Excavator shovels with a capacity of two cubic meters or more. The monthly output of medium sized shovels was 12.
 - c. Bucket dredges. They required two months to complete.

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23. Machinery ordered for Czechoslovakia included steam presses for plywood, based on the principle of fusing the layers by means of steam pressure. One press was made in a month. Frame saws, with four cutters for cutting very thick trunks, were driven by an electric motor of foreign make. Monthly output was two saws. The monthly output of woodworking machines, such as wood-turning lathes and surface planes, was unknown to source.
24. Railway bridges of various sizes and lengths were produced at the plant. Bridge constructions were exported to [redacted] Bulgaria, and Poland. Production was always to capacity. One large consignment went to Adamov, where the armament factory was being expanded.³ Assembling at home and abroad was done by employees of the plant. The Gottwald Works also made metal road bridges.
25. Material used for production at the Gottwald Works was brought to the plant by rail from the Vitkovice Klement Gottwald Iron Works. This included sheet steel, girders, and all types of profile iron. Steel for cutters and structural steel was obtained from the United Steel Works, National Enterprise (Spojene ocelarny, n.p.-SONP) in Kladno. Source did not know where the nonferrous metal came from.
26. Finished products for the USSR were sent by rail under police escort to Cerna (Cierna) nad Tisou (R49/E90), where the undercarriages of the freight cars were changed to the wide-gauge track of the Soviet railways. Cranes were transported on two railway trucks, type PH. Products for domestic use were also shipped by rail. Only small pieces, such as screws and rivets or rounds, were sent to Brno factories by road.
27. In 1952 the Five-Year Plan was fulfilled 75% and in 1953 only 25%. Only the forge fulfilled its plan 100%. The main reason for low production was the shortage of suitable material, and in many cases, other combined materials had to be used, which slowed down production. Sheet steel, flat iron and steel, in general, were in short supply. Oxygen, on which the plant depended, was not always available in sufficient quantities. Workers were dissatisfied with the very high working norms and refused to attend to some jobs. After currency reform, the plant was practically at a standstill, and the Plan was fulfilled only 5%. The continuing decrease in the standard of living was responsible for the low morale of the workers.

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29.

30. There were 15 Soviet engineers at the plant assigned to various tasks such as to X-ray the finished boilers; to check the quality of work in the workshops; to discuss with foremen methods for speeding up production; to check on finished boilers before painting; to check the completed boilers before delivery. Two of the Soviet engineers who controlled work in the workshops spoke Czech. They were responsible for the arrest of a number of employees. One of the engineers was interested in machinery and ordered designs made which were probably sent to the USSR.
31. Monthly Wages:
- a. Office employees, such as planners, accountants, appointment officials, received from 500 to 800 crowns net.
 - b. Technical employees, such as constructors, draftsmen, etc., received 800 to 1,400 crowns net. Foremen's salaries were based on the fulfillment of the plan. In cases where the plan was fulfilled 100%, they received 1,800 to 2,000 crowns net. If the plan was not fulfilled 100%, they received approximately 1,200 crowns.
 - c. All skilled workers were paid by piece rate. The basic pay in the new currency was 4.50 crowns per hour. A 50% allowance was paid for work with poisonous materials. Premiums were 20%. Basic pay for a locksmith was 3.80 crowns per hour and the maximum he could earn was eight crowns per hour. The highest wages paid in this category were to argon welders, who received 16 crowns per hour (gross). Other welders earned 12 crowns per hour (gross). Assistants to skilled workers received 60 - 80 % of these wages.
 - d. Auxiliary laborers, such as cleaners, sweepers, employees in the tool-issue shops, buyers, canteen workers, etc., earned 600 to 1,000 crowns monthly (net).

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32. The new wages catalogue, issued in September 1953, provided for eight wage categories:
- Category I. - Basic hour wages: 1.80 crowns plus premiums; total hours wage was 3.20 crowns for charwomen, disabled workmen who cleaned lavatories, cloakrooms, and rails.
 - Category II. - Basic pay: 2.00 crowns plus premium; total: 3.50 crowns for electric truck operators, elevator operators, etc.
 - Category III. - Basic pay: 2.20 crowns plus premium; total: 3.58 crowns per hour for employees in tool-issue shops and in the main stores.
 - Category IV. - Basic pay: 2.45 crowns plus premium; total: 3.60 crowns per hour for all workers who worked on a piece-rate basis. Category IV. was the lowest piece-rate category.
 - Category V. - Basic pay: 3.15 crowns. This was the highest hour-wage category, as piece-rate wages started from category IV. Piece-rate workers could earn from 1,200 to 1,300 crowns monthly (gross).
 - Category VI. - Approximate basic pay: 3.95 crowns per hour. Usually paid to workers on building sites, digging canals, road building, etc.
 - Category VII. - Basic hour wage: 4.65 crowns for welders, boiler-makers, and copper-smiths.
 - Category VIII. - Approximate basic hour wages: 5.25 crowns for argon welders. Piece-rate wages were especially unfavorable in the case of store employees who could not increase output and who were earning only basic pay. Generally working targets were very high for all workers, and they had to work very hard to earn more than the basic pay. Piece-rate wages were relatively advantageous when the work was harmful to health.
33. Deductions made from the salaries of unmarried or married employees without children were the same, i.e., more than 100 crowns monthly. In cases of married employees with children, it was about 50 crowns. Employees with five children or more were completely exempt from deductions. Income tax for a married employee with children was 1% of his salary; for bachelors, 10%. ROH (Revolutionary Trade Union Movement) contributions were voluntary, but those who did not pay them got less benefits in case of illness.
34. Special rewards and premiums were paid once in three months to workers who had special merits in the fulfillment of the plan. These grants amounted to 600 crowns per person.
35. Very often there was not enough money to keep the factory running and to pay the employees, mainly because the Soviets paid very little and production was low. The management tried to remedy this situation by paying fortnightly instead of weekly wages. Pay days were postponed from Fridays to Saturdays to the great dissatisfaction of the employees. After the currency reform, the shortage of cash became even worse and workers received only 200 crowns as advances for two weeks. Workers who received long-term loans in the old currency had to repay them in new currency, at the rate of one to five.
36. Lunches in the canteen cost 16.50 crowns per week. Meat was of inferior quality and the number of employees who ate lunches at the plant was on the decrease. Meat products, supplied by the Masna retailing enterprises, had caused the poisoning of several workers.
37. About 20% of all employees were convinced Communists. Working morale, which was never good, further deteriorated after the monetary reform. Workers refused to work on Soviet orders, knowing that the Soviets paid very little. They claimed that if products were sent to the West, their wages and, consequently, their standard of living would be much higher.

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38. Acts of sabotage were frequent at the plant. Several times workers threw pieces of iron into the machines or caused short circuits. If forced to work overtime, the workers passed the time by loafing. The following are a few examples of sabotage:

At the end of 1952, two railway cars were completed and were to be given to President Gottwald as a gift. The driver, who was supposed to break them in, jumped off the train and let the cars go on a dead-end siding. Nothing has been heard of him since, but it is generally believed that he fled Czechoslovakia. In spring 1953, it was discovered that the engine of a motor coach had been completely smashed by a heavy hammer, just before the coach was to be delivered. At the end of 1952, a militia man on patrol was disarmed, stripped of his uniform, and left wearing only his underwear. In summer 1952, a fire was started in the vicinity of the coal shed. On the same day a concrete-mixing machine was demolished and a hay-stack in the neighborhood of the plant was set afire. Some workers wrote remarks ridiculing the USSR and the Soviet engineers on goods destined for the USSR. Goods arriving from the USSR often had inscriptions stating that if the Czechs continued to work at their present speed, Czechoslovakia would starve to death in a year.

39. About 200 prisoners from the prisons on Cejl and Pricna Streets in Brno worked at the plant. Most of them were political prisoners, serving 5 to 10 years. They were assigned to shops where Communists were in the majority. They arrived by busses, escorted by two factory guards, and they received meals from the factory kitchen. Civilian workers were allowed to talk to the prisoners.
40. There were 50 factory guards, including five women. Their summer uniform was dark yellow while the winter uniform was dark green. They carried pistols. Their duty consisted of patrolling the plant and inspecting employees at the entrance to prevent smuggling arms into the plant. All of the guards were notorious Communists. At night the patrols were reinforced by members of the militia and of the Interior Guard Unit.
41. Until September 1953, the plant had only one transformer, which was not sufficient, located between the foundry and the main store. This site was permanently guarded. The transformer was unguarded, but at night was illuminated by two searchlights. There were no expert electricians in the plant.
42. Electrical current was supplied by the power plant at Oslavany.

Comments:

1. The Czechoslovak teletype subscribers' directory of 1952 lists the Brno-Kralovo Pole Plant of the First Brno and Kralovo Pole Machine Works, Gottwald Works, National Enterprise (Prvni brnenska a kralovopolska strojirna, Gottwaldovy zavody, n.p., zavod Brno-Kralovo Pole) at Krizikovo 68, in Brno-Kralovo Pole. The same directory lists another plant of the same National Enterprise as the Klement Gottwald Plant (zavody Klementa Gottwalda) at Olomoucka 7/9 in Brno.
2. Presumably the Chotebor Metal Works, National Enterprise (Choteborske kovodelni zavody, n.p.) in Chotebor.
3. Presumably the Skoda Works in Adamov.
4. Possibly the Brno Armament Works (Zbrojovka Brno) in Brno.

Enclosures: A. Map section (1 page - Air)

B. Sketches: locomotive tender for USSR, refrigerator, dryer, high-tension mast, and bridge crane (4 pages - ORR)

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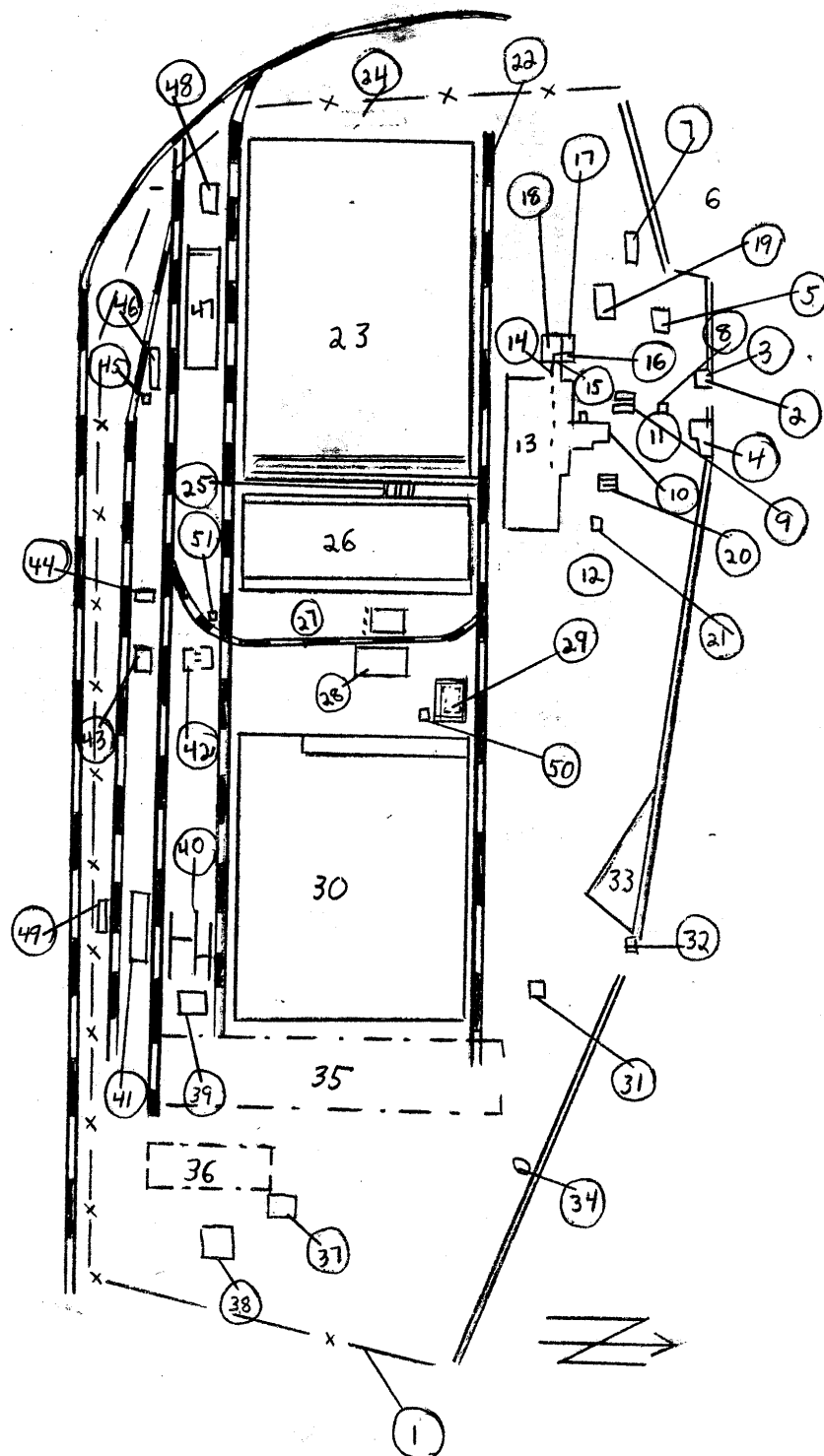
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Annex A

Gottwald Works at Brno-Kralovo Pole

Scale 1:5000



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Annex A

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1. Fence, mostly of wooden planks; the remainder of the fence, alongside the road, was of concrete.
2. Main entrance.
3. Brick guardroom on the western side of the gate, where employees and vehicles are checked.
4. Billets of the factory guards, three-storied and "I"-shaped; it measured 20x12x8 meters. Guards were housed on the ground floor. The cadre department and cashier were on the second floor. The wages department and the copying department were on the third floor.
5. Offices of the personnel department where employees' passes were issued. This building had two stories.
6. Blocks of flats on the northwest end of the plant, separated by a wall from the factory enclosure. They did not belong to the plant.
7. Factory canteen; was a one-story building measuring 12x20 meters, built in 1952.
8. Tobacconist shop where newspapers and factory periodicals were on sale, built in 1953.
9. Bicycle and motorcycle shed with a roof.
10. Pulley store, offices of the management, and offices of the works council. It was an irregular-shaped building, one part of which touched the bicycle shed. In the northern wing, which was two-storied, there was a store on the ground floor and offices on the second floor.
11. Firemen's stores attached to the above building; measured 6x7 meters.
12. Beer store, canteen, and kitchen. The ground floor was 16x20 meters.
13. Old oil plant (petrolka), a large hall, was 120 meters long and 40 meters wide. In the middle it widened 10 meters. Boilers were made here from sheet steel on rolling machines. In the northern part, aluminum boilers were produced.
14. Shipping department, 6x10 meters, connected with the above hall by a narrow passage.
15. Washrooms for the "old locksmith shop".
16. Store for waste wood, 10x10 meters.
17. Glass shop, 10x10 meters.
18. Old locksmith shop, 20x30 meters, with a large number of lathes, milling, and planing machines.
19. Old carpenters' shop, 8x15 meters.
20. Store for shaped iron.
21. Workshop where tankcar bottoms were made. It was located near the iron store and was a wooden shed, 8x8 meters in size.
22. Siding which ran through the whole plant and joined the Brno-Tisnov railway line.
23. A large production hall still called vozovka (car shop). It was of reinforced concrete and measured 200x300 meters, three storied. The eastern part was about six meters wide. Technical offices are now in this part.
24. Locksmith's and plumber's shops in a wooden hut, where cars had final fittings.
25. Shaped-iron store and crane. The capacity of the crane was $7\frac{1}{2}$ tons.
26. Latheshop, 200x80 meters, built of reinforced concrete. It contained a large number of lathes, milling, and planing machines.
27. Boilerhouse, 60x20 meters. In 1953, two transformers were erected on the south side of the boilerhouse but were not in operation in September 1953. A generator of Soviet design was installed on the east side of the boilerhouse in 1953. Its finish was so bad that the management hesitated putting it into operation. The workers wrote rude remarks on it. The generator was then removed and was permanently guarded to prevent this from re-occurring.
28. Tool shop, built of reinforced concrete, measuring 60x80 meters. In the southern part of the tool shop were old machines, which were being gradually repaired. Along the eastern wall of the tool shop was a three-story building with an electrical shop on the ground floor, technical offices on the second floor, and the workers' kitchen and canteen on the third.
29. Coal-dust basin made of concrete. It was built in 1953. A crane was to be erected there.
30. Structural-steel shop (mostarna), a large hall measuring 250x200 meters, and built of reinforced concrete. The western part of the hall had three stories and was 150 meters long, stretching from north to south, and containing offices. On the ground floor was the issue of tools, washrooms, etc., and the second floor contained the canteen, a shop of Framen, National Enterprise, offices of the Communist Party, and the drawing control department. The third floor had a new large dining room, technical offices, cadre department of the structural steel shop, and the personnel department.
31. Garages measuring 8x20 meters.
32. An entrance to the plant and the guardroom which was north of the garages.
33. Block of flats.
34. Pressure testing department for boilers. For testing, the boilers were attached to a steel tower. During tests the Husovice-Kralovo Pole road was usually closed.

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35. Between the east side of the structural-steel shop and the track to Husovice (P50/N40), various kinds of steel and iron were stored in the open. It was referred to as "state reserve" or R 1. This reserve was not to be touched, and was kept there for an emergency. It was said that in case of war, the Vitkovice Klement Gottwald Iron Works and Poldina Hutat Kladno would not be in a position to supply the current needs for the armament program. It was estimated that this reserve would keep the plant running for two years.
36. Store of various materials, in the open, in the southeast corner of the plant.
37. New cutting shop built in 1953. One floor 30x60 meters was reinforced concrete.
38. New tempering shop opened on 1 May 1953, but not yet in full operation; built of reinforced concrete; it measured 60x60 meters.
39. Cutting shop No. 1, was of reinforced concrete and measured 35x35 meters.
40. Stores of shaped iron and a travelling crane with a capacity of 7½ tons. Next to this store was a store of sheet steel as well as another crane.
41. The smithy was separated from the store of sheet steel by the siding. It was a one-story building of reinforced concrete, measuring 120x60 meters.
42. The main materials store, a four-story building, measured 40 meters long and 30 meters wide. The middle of the building was six meters wide.
43. Fuel, oil, paint, and oxygen containers store. A one-story building which measured 40x40 meters. Concrete was also stored there.
44. Photography and copying departments as well as some offices in a new building (#43). Three stories, 10x30 meters, completed in 1953.
45. Driving belt and cobblers' shop. A one-story wooden hut. Leather gloves and equipment were repaired there. It measured 8x10 meters.
46. A long building, the eastern part had three stories. The pattern shop was located there. The western part had only one floor, and contained the tinsmiths', tilesetters', and stove makers' shops. The building measured 60x10 meters.
47. Foundry, measuring 100x25 meters. In 1953, a four-story building was attached to the eastern side which measured 25x10 meters. It had not been completed in September 1953. Offices of the foundry were to be housed there.
48. A new engine shed, which measured 10x10 meters.
49. Washrooms for employees of the cutting shop. A one-story brick building, it measured 60x4 meters.
50. Fuel tanks and a gasoline pump.
51. The transformer.

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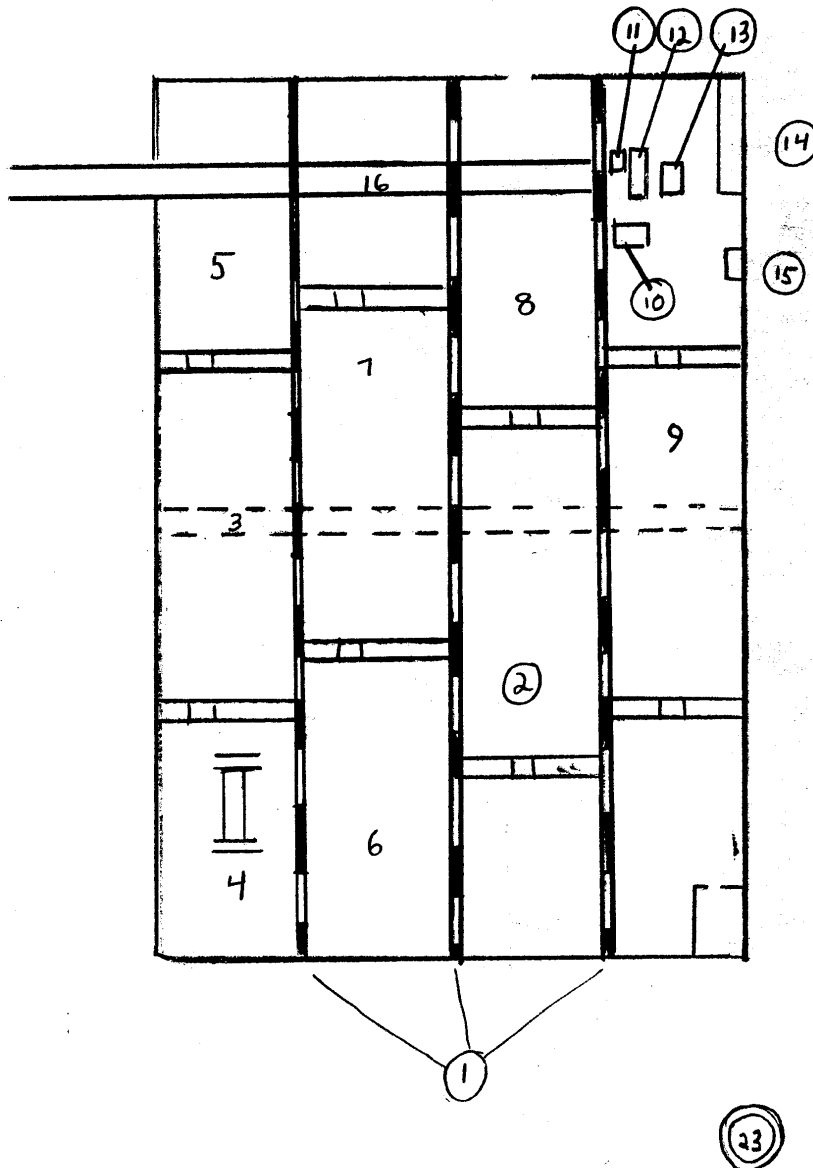
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Annex B

Railroad-Car Shop

Scale 1:2000



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Annex B

1. Three crane tracks.
2. Two bridge cranes on each track with a capacity of $2\frac{1}{2}$ to $7\frac{1}{2}$ tons each. Rails were eight meters above the ground.
3. Passage through the center of the depot, running north to south, and which was kept open at all times.
4. Boiler-welding shop.
5. Department where cupolas to the underground tanks were made of "bimetal" from the USSR, sheet steel with a layer of stainless steel on top.
6. Boiler-assembly shop.
7. Tank-car shop.
8. Workshop where undercarriages for tankcars were assembled.
9. Streetcar assembly shop.
10. A mobile planing machine was located in the eastern part of this hall.
11. Small planing machine.
12. Large slide planing machine.
13. Horizontal milling machine.
14. Welding equipment.
15. Small canteen.
16. Shunting track for finished streetcars.

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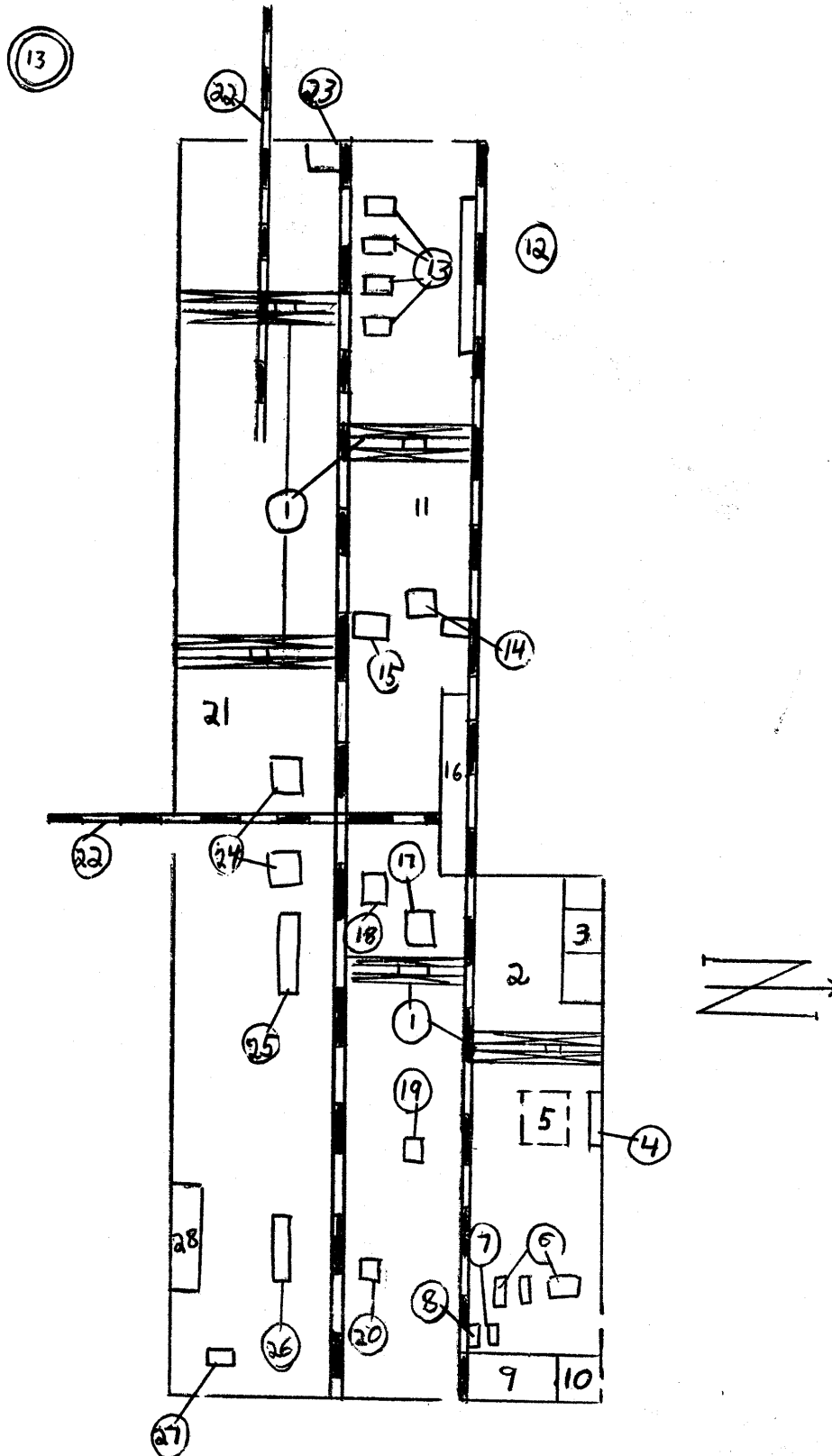
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Annex C

Oil Plant

Scale 1:500



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Annex C

1. Cranes.
2. Coppersmiths' shop.
3. Washrooms.
4. Argon welding equipment.
5. Argon welding shop.
6. Two German bending machines.
7. Polishing machine.
8. Grinding machine, TOS model.
9. Tool-issue shop.
10. Carbide store.
11. Boiler preparation department, separated from the rest of the plant by a wooden wall.
12. Chucking benches.
13. Boiler pressing department.
14. Arc welding equipment.
15. Steel-sheet rolling furnace.
16. Tool-issue shop.
17. Bending machine.
18. Coke furnace for heating tubes.
19. Iron sawing machine.
20. Four spindle drilling machines.
21. Boiler material preparation department.
22. Siding used for the removal of finished goods.
23. Electrical switchboard.
24. Two large rolling furnaces.
25. German planing machine, eight meters long.
26. Automatic shearing machine.
27. Press for bending sheet steel, of foreign make; its capacity was unknown.
28. Office of the works foreman.

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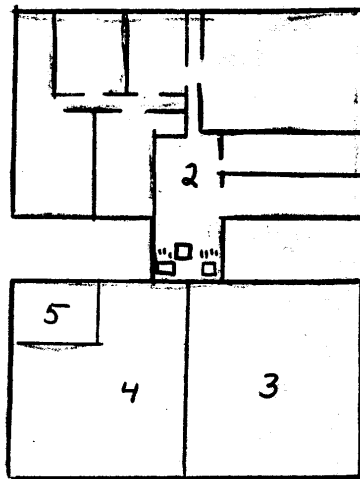
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Annex D

Main Materials Store

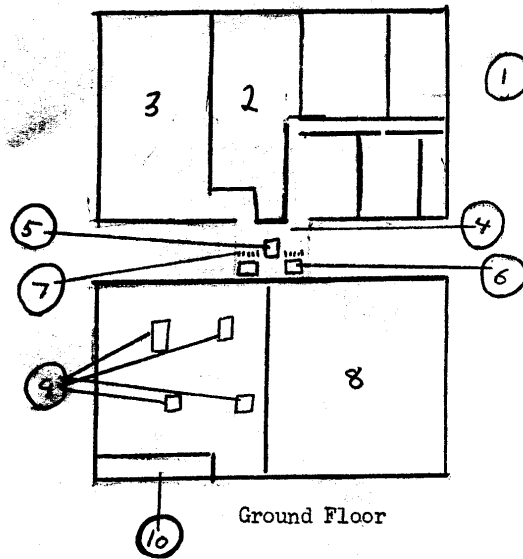
Scale 1:500

(12)

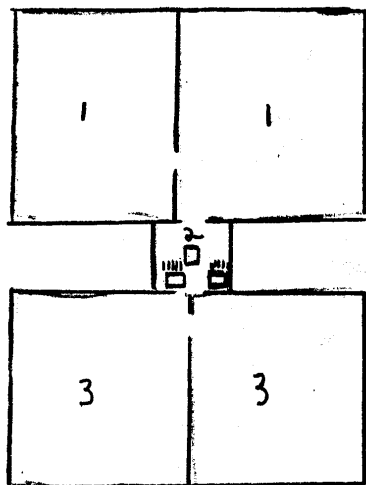


Third Floor

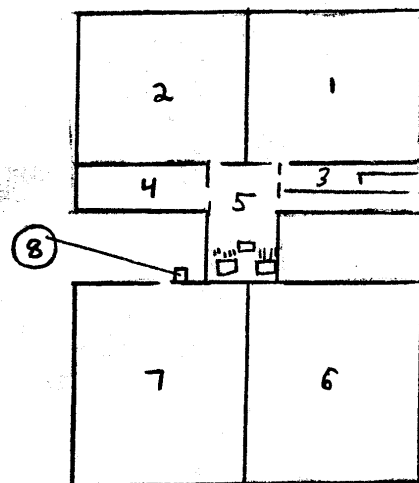
(1)



Ground Floor



Fourth Floor



Second Floor

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25X1

Annex D

a/ Third floor:

1. Offices.
2. Stairs and elevators.
3. Electromotors store, crane trolleys.
4. Small electromotors store.
5. Store of small screws and rivets, separated by a wire netting.

b/ Ground floor:

1. Offices.
2. Material-receiving room.
3. Storerooms.
4. Connecting part of the building.
5. Main girder in the center of the connecting part. The girder was 1x1 meter in diameter.
6. Two elevators.
7. Stairway.
8. Store for screws, nails, and rivets.
9. Special steel-cutting shop. Four automatic sawing machines, two German and two TOS models.
10. Storage of shaped iron, used mainly in the production of stainless screws.

c/ Fourth Floor:

1. Two clubrooms, where ROH meetings were held.
2. Elevators and stairs.
3. Glass store which included pane glass, wire glass, and other glass products.

d/ Second Floor:

1. Ball bearings and springs store with all kinds and sizes.
2. Stationery and leather-goods store.
3. Lavatories, baths, and washrooms.
4. Washrooms.
5. Elevators and stairs.
6. Storage of all clockworks and fuse burners.
7. Storage of electrical materials and appliances.
8. Fire emergency ladder.

The building was overloaded and some installations had to be removed, as the walls began to crack.

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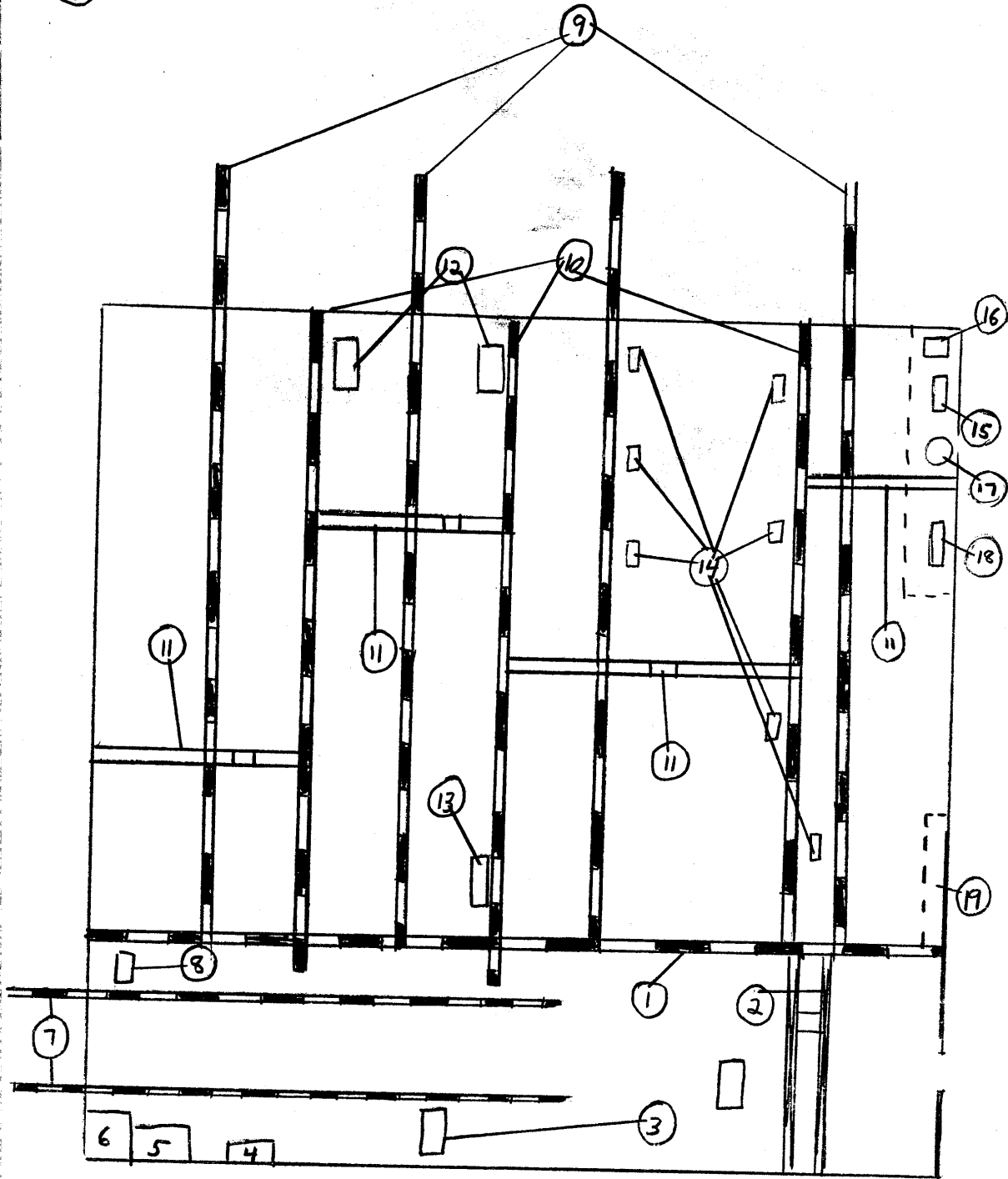
25X1

Annex E

Old Cutting Shop

Scale 1:200

(39)



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25X1

Annex E

1. Large crane track running along the eastern wall.
2. Crane with 10-ton capacity.
3. Shearing machine of Polish origin used for cutting sheet steel up to 13 mm. thickness. A shearing machine, Czechoslovak-make Stork, for cutting steel up to 12 mm.
4. Controller's office.
5. Workshop office.
6. Pattern store, used for acetylene cutting.
7. Narrow-gauge track which entered the plant from the south and was used for bringing in material supplies.
8. TOS grinding machine.
9. Narrow-gauge track which entered the shop at four points.
10. Three crane tracks which split the western part into four sections.
11. Four hand-operated cranes, for lifting iron sheets to the trestle. Their capacity was three tons.
12. Two cauterizing or baking machines for making various supports, figures, etc. One machine was German and the other was produced at Chotebor.
13. A magnetic cauterizing machine of German origin worked by patterns (sic), series production.
14. Benches for hand-operated acetylene cutting from plates. Material for the steel-shop was prepared here.
15. Templet maker's bench surrounded by a wire fence.
16. German shears for cutting thin plates.
17. Small electrical drilling machine for drilling templets.
18. Templet maker's bench behind a wire fence. On this bench there were only tools.
19. Oxygen bottles for cauterizing. This place was fenced by wire.

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25X1

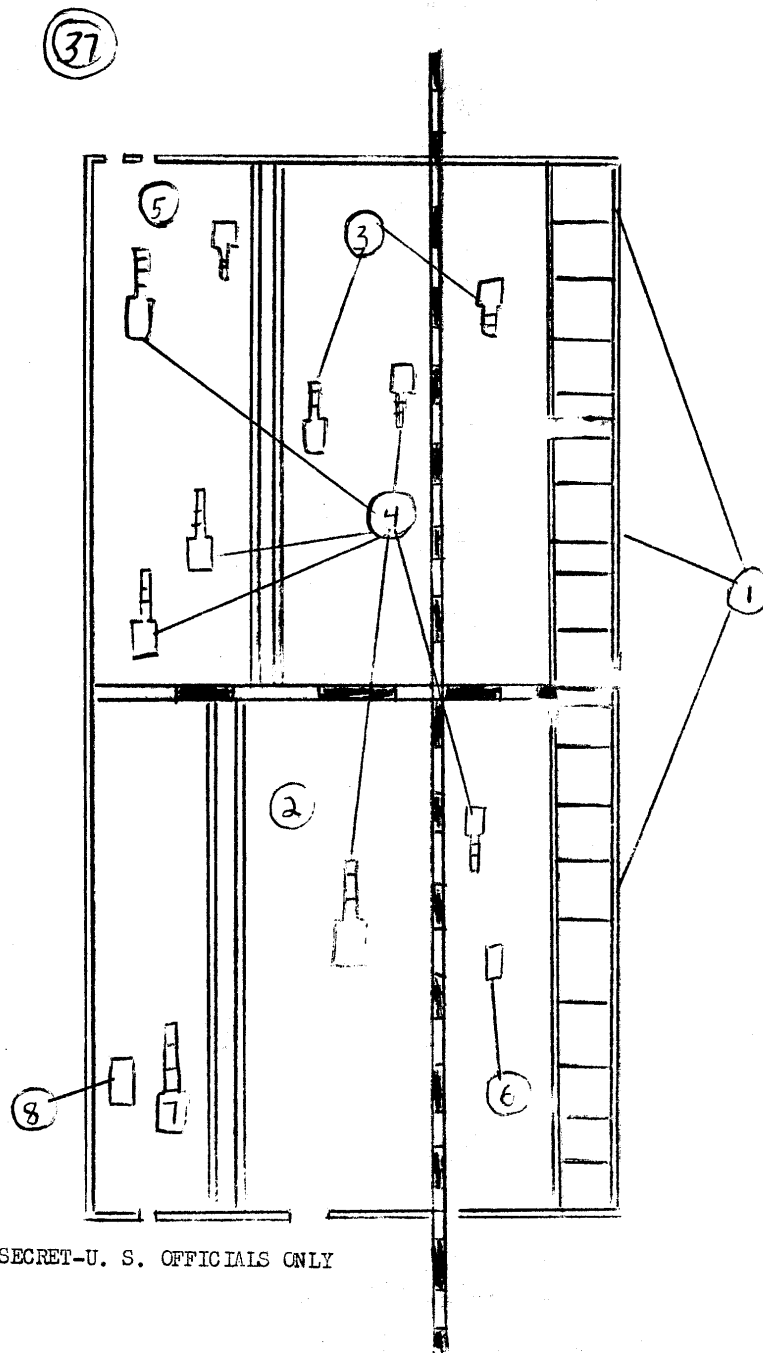
Annex F

1. Offices occupied by the officials responsible for fixing the working targets (ukolaei).
2. Crane track running from north to south and which divided the shop into two sections. Each section had an electrical crane with hand-operated pulleys.
3. Two German cutting machines, one a Heller, suitable for cutting any type of metal.
4. Five TOS cutting machines.
5. One automatic German cutting machine used for series cutting.
6. One small bow saw of German origin used for cutting rounds.
7. Large sawing machine of German origin used for cutting rounds up to 500 millimeters in diameter. It was the largest sawing machine in the entire Brno district.
8. Machine of German make for cutting flat iron and which shaped iron of small diameters.

Annex F

New Cutting Shop

Scale 1:300



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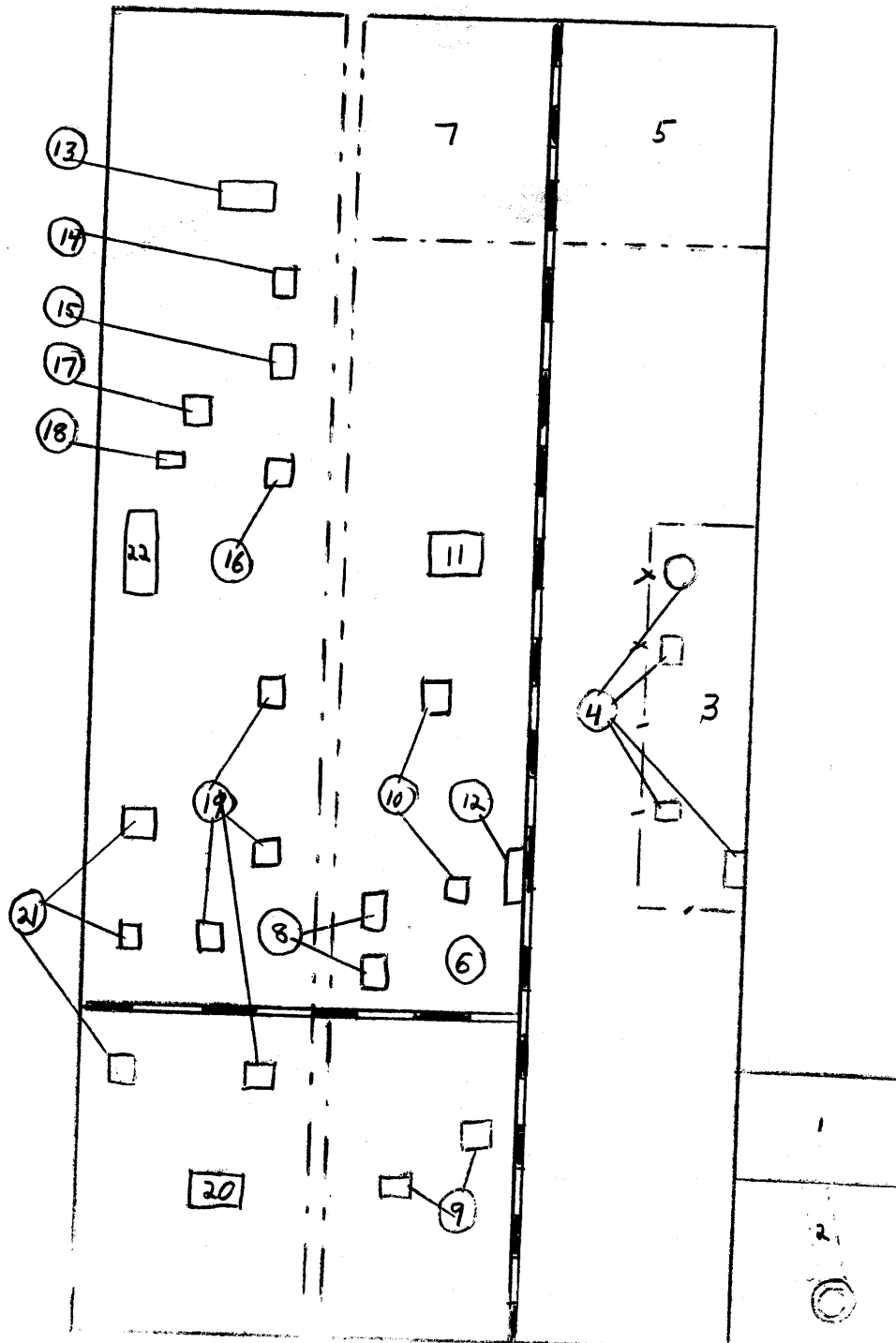
-20-

Annex G

Forge

Scale 1:500

(41)



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25X1

Annex G

1. New furnace, not yet in operation. Underground pipes lead to the metal chimney.
2. Chimney.
3. Lathe-cutters' shop surrounded by wire. Drills are hardened and various tools repaired in this shop.
4. Two forges, one power hammer, and one hardening furnace.
5. Store for swages.
6. Crane track running from east to west. Another crane of 25-ton capacity ran from north to south. These cranes carried material from the furnace to the power hammer.
7. Store of materials which went to the forge for further treatment.
8. Two heating furnaces of Czech origin used for heating iron before it came to the power hammer.
9. Rivet-pressing machine of German origin and a large TOS pressing machine used for removing excessive contents of iron.
10. Large foot-operated power hammer. A smaller power hammer was near the materials store.
11. Steel working bench for work dealing with hand hammers.
12. Grinding machine, TOS model.
13. Large bending machine.
14. Cutting machine of German origin which was suitable for edging, stuffing, and bending. It was used for making covers and draw bars.
15. New hydraulic press of Czech origin used in the production of various spare parts.
16. German press used for straightening plates.
17. Forge.
18. Anvil.
19. Four heating furnaces.
20. Press.
21. Three pneumatic power hammers, used primarily for making gun barrels.
22. Large German hammer, used for forging large pieces in swages.

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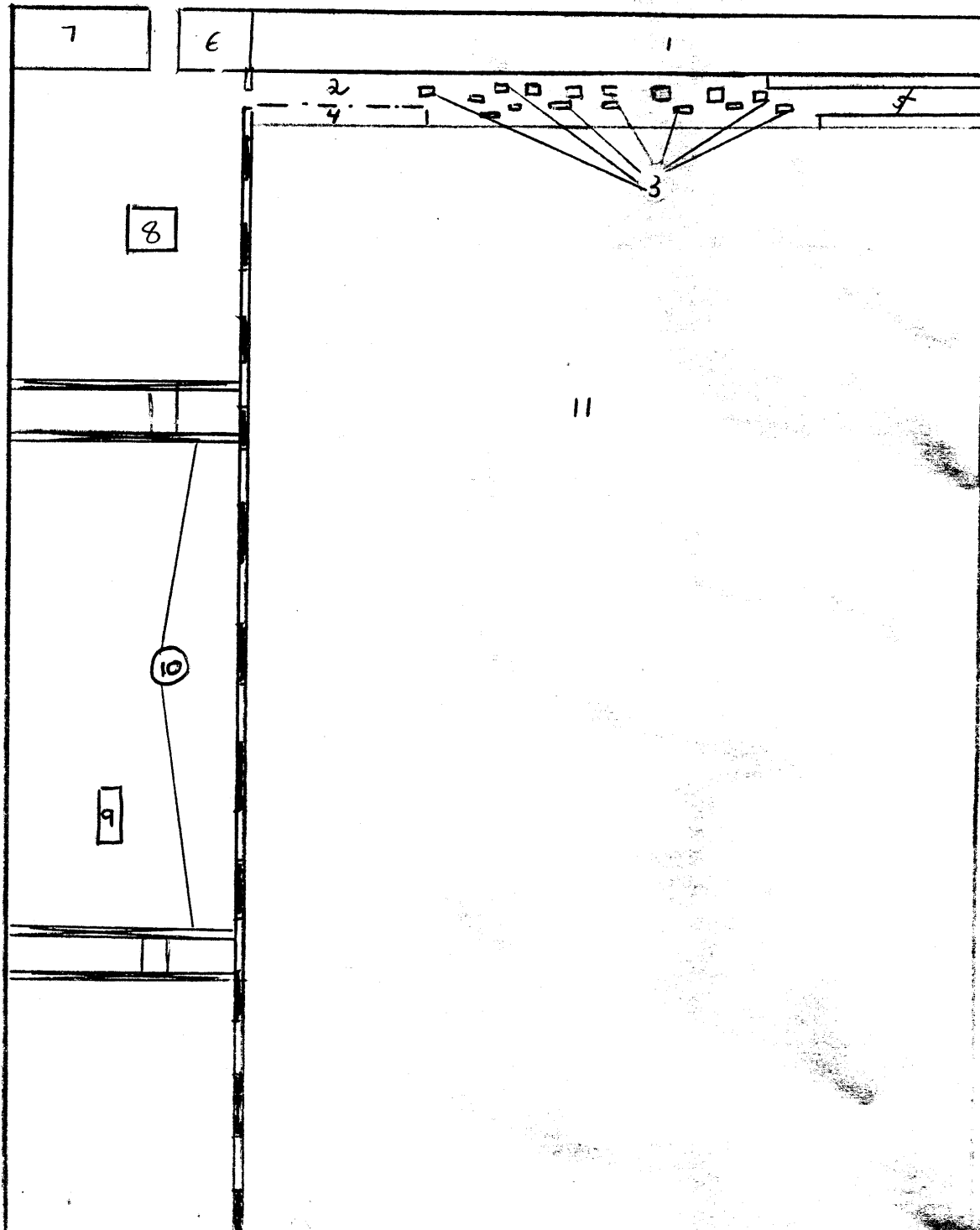
Annex H

Structural-Steel Shop

Scale 1:1000

(30)

25X1



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25X1

Annex H

1. Technical offices in a four-storied building.
2. Production hall, approximately 10 meters wide.
3. Machinery including lathes and milling machines for making cogged wheels, crane wheels, trolley beds, gears, and spare parts for cranes.
4. Store for cut material brought from the cutting shop.
5. Work benches with cramps.
6. Tool-issue shop.
7. Two large compressors.
8. Shearing machine with a capacity up to 50 millimeters and of latest hydraulic type; it was made by Henry Pels in East Germany and was put into operation in 1953.
9. Large planing machine, 8 meters long.
10. Two cranes.
11. The actual Structural-Steel Shop occupied the largest part of this hall. Bridges, cranes, masts, etc. were assembled here. This shop had the highest rate of accidents.

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